Appendix E

Metropolitan Planning Factors

APPENDIX E

METROPOLITAN PLANNING FACTORS

The Transportation Equity Act for the 21st Century (TEA-21) maintains the core metropolitan and statewide transportation planning requirements that were present under the Intermodal Surface Transportation Efficiency Act (ISTEA). The key change in the new legislation is the consolidation of 16 metropolitan and 23 statewide planning "factors" into seven broad "areas" to be considered in the planning process, both at the metropolitan and statewide level. These areas have guided this plan's development and are given consideration through discussion in various aspects of the plan. In addition, many of the seven areas are addressed through the plan's recommendations and/or through reflection in the plan's goals and objectives, as illustrated below.

1. **Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency.** The economic vitality of the OKI region is a central issue in the development of the transportation plan, as shown through the plan's emphasis on ideas that address this issue. For example, Table 5-3 illustrates that, as a whole, the OKI region is projected to experience a substantially higher rate of growth than any of the states in which its counties are located. Chapter 6 provides a list of management strategies and technologies to deal with this growth through development and travel pattern ideas. In addition, OKI's Land Use Commission will deal with issues that will promote the economic vitality of the region. Finally, Chapter 9 deals with building an Intelligent Transportation System (ITS). One of the recommendations for ARTIMIS states that the system should be provided with full instrumentation along an additional 44 miles of freeway, as shown in Figure 9-1. This recommendation, along with others in the chapter, help support the economic vitality of the OKI region by increasing productivity and efficiency in the transportation system, thus increasing the competitiveness of the metropolitan area.

2. **Increase the safety and security of the transportation system for motorized and nonmotorized users**. The second broad area to be considered in the planning process is addressed in various aspects of the plan. Chapter 9 describes an Incident Management program that detects, verifies and transmits information on the location and nature of vehicle accidents. This allows appropriate emergency service to be dispatched quickly, thereby reducing incident response and removal times. In addition, the chapter also provides recommendations for Transit ITS infrastructure. An Automatic Vehicle Locator (AVL) and Computer Aided

Dispatch (CAD) uses satellites and computers for tracking vehicle real-time locations in order to provide a variety of capabilities for improving security and fleet management. Chapter 10 describes recommendations for expansion of bicycle and pedestrian travel. One recommendation is that roads identified in the OKI Bike Route Guides be maintained so that "recommended bike routes" are not degraded for safe bicycle travel, and "alternate bike routes" and "not recommended" roads are improved for safer bicycle travel. Another recommendation in the chapter states that a commitment should be made to maintain pedestrian facilities, to remove debris and encroaching plant material and to repair deteriorated paving. The importance of safety and security of the transportation system is shown by the plan's goal of improving travel safety — "The transportation system should provide for reducing the risk of accidents that cause death or injuries and provide for the security of transportation users."

3. **Increase the accessibility and mobility options available to people and freight**. Chapter 5 provides information to help determine future travel needs in the region. This is achieved by examining such items as population and household projections, age structure changes, employment information and metropolitan development rings. The region was divided into four development rings—urban core, innerbelt, outerbelt and rural fringe — with recommendations for each ring. By responding to each ring's distinctive needs, the plan strives to improve mobility throughout the region and optimize each ring's unique potential. Chapter 8 also discusses means to improve traffic operations, thereby increasing accessibility. By enabling roadways to perform more efficiently, operational improvements increase roadway capacity, which will help reduce the need for expansion projects and help preserve and maintain the existing infrastructure. Chapter 14 deals with moving freight more efficiently throughout the area. There are several recommendations listed, including expanding the efforts of the North/South Initiative to address truck and rail freight issues regionwide and the preservation, maintenance and improvement of freight and multimodal facilities in the region as well as access to those facilities. Five specific objectives are listed with the goal — "Improve mobility for people and goods."

4. **Protect and enhance the environment, promote energy conservation, and improve quality of life.** Chapter 3 deals with transportation initiatives to clear the air. One project highlighted in the chapter is the Regional Ozone Coalition, which is a voluntary association of local governments, organizations and businesses committed to reducing smog in the Greater Cincinnati region. This local commitment, which began in 1994, encourages voluntary efforts by individuals and businesses to reduce ozone-forming activities on forecasted high ozone days.

Chapter 4 provides information on current transportation systems — public transit, vanpooling, reverse commute and park-and-ride lots — that promote energy conservation through reducing single-occupant vehicles (SOV) operating in the region. Chapter 10 recommends improvements to the regional trails network and street system to encourage greater use of walking and bicycling time, which would have the effect of conserving fuel, reducing vehicle emissions and improving personal health. Chapter 11 builds on these systems by making recommendations for future developments, including expansion of transit services, development of rail transit, construction of transit centers and park-and-ride lots, and connections between the transit systems serving the region. The plan's goal "Protect environmental quality" has six objectives associated with it to ensure this broad area is adequately addressed.

5. **Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.** Chapter 11 provides a long list of recommendations to improve the connectivity between various modes of transportation in the region. Proposed rail transit developments would integrate transit services to rail sites. The I-71 Alignment, for example, would provide a spine for connecting light rail segments, commuter rail lines and bus routes. Transit centers, including the intermodal transit center being constructed in downtown Cincinnati, are facilities where transfers can be made between bus routes and rail transit lines, or between different rail transit lines. The plan recommends that 22 transit centers and 14 park-and-ride lots be constructed in the region. Chapter 14 highlights the importance of integrating the various freight transport modes — roadway, rail, water, air, pipeline and intermodal — and recommends the continued monitoring and facilitation of the movement of freight in, around and through the region. The objective "Facilitate efficient intermodal transfers for both passengers and freight" is associated with the goal of improving mobility for people and goods.

6. **Promote efficient system management and operation.** Chapter 6 provides information on managing congestion in the region. The Congestion Management System (CMS) is a systematic process for managing congestion that provides information on transportation system performance and on alternative strategies for alleviating congestion and enhancing the mobility of persons and goods to levels that meet state and local needs. Chapter 7 deals with strategies for managing travel demand that focus on changing travel behavior to mitigate traffic congestion, in lieu of building infrastructure to accommodate travel needs. Chapter 8 provides information on improving traffic operations including access management techniques that improve mobility and safety. Finally, how to

build an intelligent transportation system is discussed in Chapter 9. The objective "Improve the operating efficiency of existing infrastructure" is listed with the goal of improving mobility for people and goods. In addition, the efficient management and operation of the transportation systems will require sufficient funds as shown by the goal, "Develop new transportation funding sources and strategies".

7. **Emphasize the preservation of the existing transportation system**. Chapter 4 provides a snapshot of the region's existing transportation system. In the ever-changing transportation environment, this overview serves as a baseline to which policies, alternatives and improvements can be referenced. Chapter 9 highlights the plan's effort to optimize the existing system through recommendations for applying operational improvements and expanding the use of intelligent transportation system technologies. Chapter 12 provides information on highway expansion, but gives funding priority to system preservation and allocates a sizeable portion of available revenues to this purpose. The plan emphasizes the preservation of the existing transportation system through the objective, "Improve the operating efficiency of existing infrastructure" as a means of obtaining its goal of improving mobility for people and goods.